

Title (en)

Process of preparation of copolymers clear in water.

Title (de)

Verfahren zur Herstellung von in Wasser klaren Copolymerisaten.

Title (fr)

Procédé de préparation de copolymères clairs dans l'eau.

Publication

EP 0418721 B1 19931201 (DE)

Application

EP 90117566 A 19900912

Priority

DE 3931681 A 19890922

Abstract (en)

[origin: EP0418721A2] Preparation of copolymers which are clear in water from A) 45 to 90% by weight of N-vinylpyrrolidone, B) 10 to 55% by weight of a vinyl ester and C) 0 to 10% by weight of further copolymerisable monomers by free radical polymerisation in an organic solvent in the presence of a free radical initiator and separation of the organic solvent and other volatile components by distillation, by carrying out the polymerisation until the N-vinylpyrrolidone content of the reaction mixture corresponds to 5 to 1% by weight of the amount of N-vinylpyrrolidone used, substantially separating off the organic solvent and other volatile components by distillation, adding water to the mixture, leaving the aqueous solution for 1 to 10 hours at 50 to 100 DEG C with further addition of free radical initiators and then virtually completely removing volatile organic components by steam distillation.

IPC 1-7

C08F 226/10; C08F 218/04

IPC 8 full level

C08F 6/10 (2006.01); **C08F 2/04** (2006.01); **C08F 2/10** (2006.01); **C08F 6/00** (2006.01); **C08F 26/10** (2006.01); **C08F 218/02** (2006.01); **C08F 218/04** (2006.01); **C08F 226/10** (2006.01)

CPC (source: EP US)

C08F 6/003 (2013.01 - EP US); **C08F 218/04** (2013.01 - EP US); **C08F 226/10** (2013.01 - EP US)

Cited by

EP0688799A1; EP0545209A1; EP0655470A1; US5712356A; US5936052A; US7449531B2; US7572871B2; US6342570B1; US7572870B2; US7629425B2; US7442751B2; US7847044B2

Designated contracting state (EPC)

DE ES FR GB IT NL

DOCDB simple family (publication)

EP 0418721 A2 19910327; EP 0418721 A3 19910703; EP 0418721 B1 19931201; CA 2025043 A1 19910323; DE 3931681 A1 19910404; DE 59003682 D1 19940113; ES 2046636 T3 19940201; JP 2974747 B2 19991110; JP H03170516 A 19910724; US 5122582 A 19920616

DOCDB simple family (application)

EP 90117566 A 19900912; CA 2025043 A 19900911; DE 3931681 A 19890922; DE 59003682 T 19900912; ES 90117566 T 19900912; JP 25203390 A 19900925; US 58615390 A 19900921